DOCUMENT RESUME

ED 456 321 CE 082 302

AUTHOR Smith, Erica; Green, Annette; Brennan, Ros
TITLE A Foot in Both Camps: School Students and Workplaces.
PUB DATE 2001-03-00
NOTE 16p.; In: Research to Reality: Putting VET Research To Work. Proceedings of the Australian Vocational Education and Training Research Association (AVETRA) Conference (4th, Adelaide, Australia, March 28-30, 2001); see CE 082 232. Research funded by the National Research and Evaluation Committee.
AVAILABLE FROM For full text: http://www.avetra.org.au/PAPERS%202001/e%20smith.pdf.
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Apprenticeships; Cooperative Education; Corporate Education; Developed Nations; *Education Work Relationship; Employer Attitudes; *Experiential Learning; Foreign Countries; High School Students; Inplant Programs; Job Placement; Part Time Employment; Program Effectiveness; *Student Attitudes; Teacher Attitudes; *Vocational Education; Work Experience; *Work Experience Programs
IDENTIFIERS *Australia (New South Wales); *Australia (South Australia)

ABSTRACT

A research study in Australia examined the nature, extent, and methods of workplace learning for school students. Following a literature review that found that the proportion of school students who work part-time is increasing but that there is relatively little research on the learning outcomes of either work experience or work placements, interviews were held with policy makers, employers, and researchers in the area that held the literature review's findings. In addition, a survey of students in grades 10-12 in 13 schools, was conducted and follow-up interviews and focus groups with students, teachers, and employers were held in New South Wales and South Australia. The study showed that just over two-thirds of the respondents had done work experience, and both students and teachers found value in the experience. Only 11 percent had done vocational placements, and a very small number were involved in part-time apprenticeships and traineeships. Students reported that they learned much more in paid work and vocational placement than in work experience. Finally, students reported they learned experientially, by watching others, and by being shown individually by a trainer or co-worker. About 60 percent of the students have had formal paid work, including 10 percent who worked in family businesses. Although students did not at first report much learning in any of the types of workplace activity, when prompted, they tied workplace activities to learning workplace skills. (Contains 29 references.) (KC)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 456 321

A foot in both camps: school students and workplaces

Erica Smith

University of South Australia

Annette Green and Ros Brennan

Charles Sturt University, New South Wales

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

K. Whittingham

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

It is now uncommon for young people to leave school without having had experience in workplaces. Sometimes such experience is arranged by schools - through work experience, structured work placements or other programs. Increasingly young people are also getting workplace experience as part-time student workers. This experience may be quite extensive. A research project funded by the National Research and Evaluation Committee has been examining the different types of learning experienced by students in the different modes of experiencing the workplace. The project also examined the question of whether certain students find access to such experiences more difficult than others do.

These questions are of vital importance, because workplace experience assists young people in their transition from schools to full-time work; and also because the foundations for lifelong learning through work may be set down in early workplace experiences. It is therefore essential to have some understanding of the nature, extent and methods of workplace learning for school students. This paper presents the findings of the project.

An important development in the post-compulsory education system has been an increased involvement of secondary school students in learning in workplaces; both in work experience and vocational placements in VET in Schools programs. In addition, an increasing number of school students are now in formal paid employment, including around 4000 in employment as part-time apprentices and trainees (MCEETYA 2000). These changes encourage debates including: the suitability of school students having paid work; the desirability of recognition for the skills gained in paid work; inequities of access to all types of workplace experiences; and whether work experience and placements encourage an uncritical acceptance of workplace values which need to be challenged. However, there has been little explicit examination of what students learn in workplaces and how they learn it. This paper gives some of the results of an NREC-funded project, which examines the extent and nature of learning that students in years 10, 11 and 12 gain from their experiences in workplaces (Smith and Green, forthcoming). Relevant literature will be examined briefly as well as key findings from a survey carried out among students from years 10, 11 and 12 in thirteen schools, and the results of follow-up focus groups and interviews with students, teachers and employers in New South Wales (NSW) and South Australia (SA).

CE 082 302

BEST COPY AVAILABLE

Literature review

Part-time work

The proportion of school students who work part-time is generally agreed to be increasing, although the extent of students working is unclear. Somewhere between 30% and 50% of Australian school children of working age are generally believed to have formal part-time work (Australian Bureau of Statistics 1997[1]; Robinson 1999; Wooden 1998; Yap 1998). Much of the literature on students working (especially the American literature) revolves around whether it is a 'good thing' (Hotchkiss 1986; Hull 1999) or a 'bad thing' (Greenberger 1988). Robinson (1999) and others stress the link between students working and subsequent success in finding full-time work, although it is not clear that one causes the other. A small number of writers have been concerned about equity of access to part-time work (Griffin 1985; Yap 1998)

There has been little research on training and learning among student workers. It is usually agreed that students working encourages the development of general, transferable skills (Hull 1999). However, there has been little attention paid to how these or other skills are actually learned.

Work experience and vocational placements

It is often difficult to untangle work experience from structured work placements in the literature, with the terms having different meanings in different educational systems. Work experience is generally used to refer to the typical 'finding out about work' week undertaken by Australian students in years 10 or 11 (Smith and Harris, forthcoming). During the late 1980s and early 1990s when training reform meant that skills development rather than work familiarisation became more favourably regarded (Sweet 1995), work experience became the Cinderella of student workplace experiences. Vocational placements are increasingly common now that the vast majority of Australian schools offer VET in Schools programs. In 2000, 90% of Australian schools offered such programs, involving over 130,000 students (MCEETYA 2000). However, not all VET programs require placements (MCEETYA 2000).

The major themes in the literature appear to be:

- 'Enthusiastic' literature extolling the virtues of work placements (eg Frost 2000)
- Concern with the role of employers and availability of placements (eg Figgis 1998a; Miles Morgan Australia 1998; Misko 1998; Smith and Smith 1996)
- Resourcing issues, including staff development of school teachers (eg Keating and Zbar 1994; Ryan 1997; Sweet 1995)
- A large amount of literature on 'how to' administer programs (eg Misko 2000)
- Critical literature (eg Petherbridge 1997; Shilling 1989; Wellington 1992)
- Scoping literature (eg Ainley and Fleming 1995, 1997; Malley et al, forthcoming).

There is relatively little literature on the learning outcomes of either work experience or work placements. Athanasou (1996, p 8) points out that 'school-industry programs' may have 'positive experiential by-products', as often cited in the 'enthusiastic' literature, but that more work needs to be put into determining the

intended consequences of such programs. Three studies which did investigate learning are those by Figgis (1998b) in Australia, Stasz and Kaganoff (1997) in the US and Petherbridge (1997) in the UK.

Outstanding issues from the literature

The literature review revealed the following major points, which raised implications for the current study.

There is little literature about student-workers in Australia, and the data from the Longitudinal Survey of Australian Youth (LSAY) is dated (1992). A scoping study to establish the current extent and nature of part-time work for school students is needed.

There is a large body of literature, both Australian and overseas, on work experience and work placements, but much of it falls either into the 'scoping' category or the 'enthusiastic' category. There has been relatively little empirical investigation of what school students actually learn in workplaces.

There is some concern over equity of access to part-time work and to work experience and placements, but there is little empirical research in this area.

Several writers allude to *the superiority of placements compared with traditional work experience,* but more exploration of the differences is needed.

There is still some confusion over the outcomes intended from both work experience and structured work placements.

There is growing interest in capturing the learning from part-time working, although evidence suggests that policy-makers are more interested in this than students (Billett 1998; MCEETYA 2000).

Interviews with key stakeholders

At the start of the research process, interviews were held with policy makers, employers and researchers in the area. These interviews confirmed many of the findings from the literature review. Many key stakeholders were struggling with implementation issues such as funding, staffing, availability of both work experience and vocational placements and equity issues. Learning, when discussed, was seen as very different from school-based learning. Stakeholders believed VET programs may offer students the opportunity to excel with alternative curriculum and different experiences. Various factors have caused both State and Commonwealth to increase the offering of VET subjects in senior school and include these subjects in senior certificates.

Survey method

The project steering committee, stakeholders and officials from DET (NSW) and DETE (SA) assisted in selecting the schools for administration of the survey. The sample of 13 schools represented public and private schools, rural and urban

locations, and students from a range of socioeconomic and ethnic backgrounds. At the selected schools, all students in years 10, 11 and 12 were invited to complete the questionnaire, yielding 1451 useable responses. The response rate was much higher in non-government schools than in government schools, despite having selected more of the latter. The results report on about half from each sector. The survey was administered in the second semester, when many students in year 12 were unfortunately not available because of HSC (NSW) and SACE (SA) studies.

The survey instrument contained five parts: personal information; overview of the student's experiences in workplaces; detailed questions about work experience; detailed questions about one paid job; detailed questions about one structured work placement; and learning and training questions. Students were asked to compare the different types of experiences, and this was investigated further in the case studies.

Case study method

After the survey, nine case studies were undertaken to provide qualitative data. Five were held in schools in NSW and SA. In each school, one focus group consisted of 8-10 students who had participated in at least two workplace activities out of the three: work experience, vocational placements and paid work. A second group in each school was made up of VET teachers, a careers adviser and the Principal or her/his nominated representative. Case studies were all in public schools, to increase the representation of public schools in the project. Because it was difficult to access year 12 students during the course of the case studies, as they were carried out in the second half of the academic year, a special focus group of year 12 students was also convened. Four groups of employers were also interviewed. A particular effort was made to incorporate discussion of vocational placements in this qualitative phase of the research, since the survey had produced only a limited response from students undertaking placements.

Findings from the project

This paper focuses on the project's first two research questions:

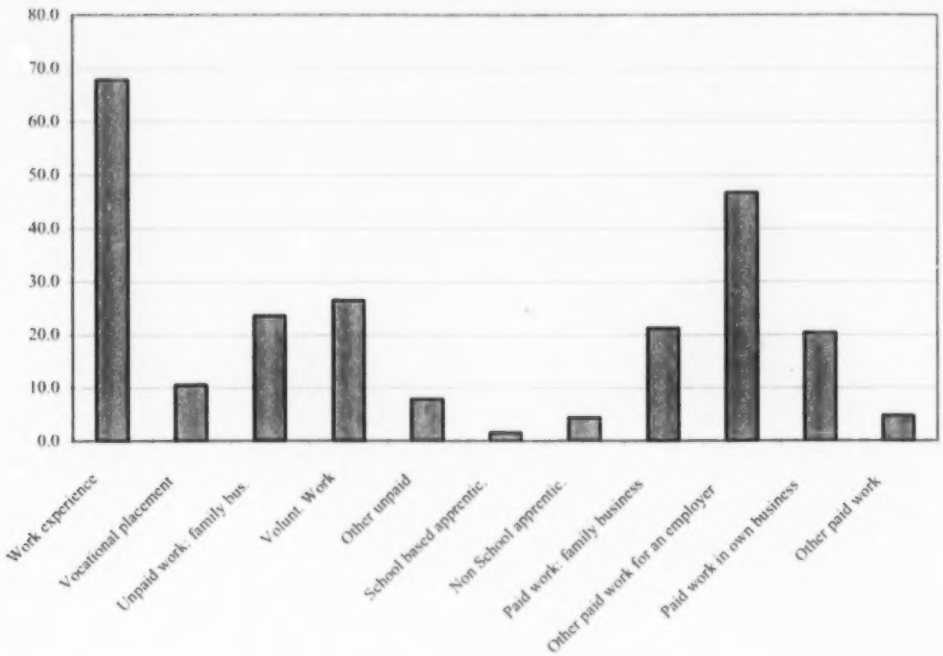
1. 'What is the extent and nature of the way in which years 10, 11 and 12 school students experience the workplace?'

2. What is the nature and relative importance of learning gained from these experiences?

The extent and nature of the way in which years 10, 11 and 12 school students experience the workplace

The paper can only present a selection from the huge amount of data gathered in the survey. As the process has revealed a dearth of information on learning from work for school students, this takes priority. Qualitative data from the focus group interviews is included. The modes of experiencing the workplace by school students in years 10-12 is shown in Table 1.

Table 1: Involvement in different modes of experiencing the workplace (% of all students)



The results show that just over two-thirds of the respondents had done work experience, but only 10.5% had done vocational placements. There were very small numbers involved in part-time apprenticeships and traineeships, with more of these students arranging their own (4.4%) than participating in schools-based programs (1.6%). 46.7% of the students had 'ordinary' part-time work for an employer and one fifth had their 'own business', which appeared predominantly, but not exclusively, to be babysitting. This data was also analysed by equity groups.

The case studies indicated that most school students in years 10-12 had a considerable amount of workplace activity.[2] Work experience was almost universal in the schools in the case studies; vocational placements were, of course, only undertaken by students who had selected VET courses. Paid work was less universal; generally, schools estimated that around half of students of working age had jobs, as was found in the data.

Table 2 shows the industry area[3] in which students' workplace activities took place. The students were asked to answer for their *longest-lasting* period of work experience, paid job or vocational placement. Some students had difficulty allocating

their responses to an industry area; where possible, researchers made appropriate allocations during the data entry process.

Table 2: Industry area of workplace activities

	Work experience		Paid work		Vocational placement	
	Count	%	Count	%	Count	%
Farming, forestry, fishing, mining	31	3.0%	38	5.1%	1	1.4%
Manufacturing	84	8.2%	24	3.2%	16	21.6%
Building including electrical and plumbing	45	4.4%	14	1.9%	7	9.5%
Retailing	183	17.9%	237	31.7%	9	12.2%
Fast foods, cafes, or restaurants	71	6.9%	233	31.2%	27	36.5%
Cultural, recreational or sporting	63	6.2%	45	6.0%	-	-
Banking/real estate/insurance	34	3.3%	6	0.8%	-	-
Government administration, including education and defence	141	13.8%	3	.4%	5	6.8%
Health, personal and community services (including child care)	203	19.9%	29	3.9%	5	6.8%
Communications/media/computing	118	11.5%	16	2.1%	1	1.4%
Babysitting	n/a	n/a	51	6.8%	n/a	n/a
Newspaper delivery	n/a	n/a	22	2.9%	n/a	n/a
Other	49	4.8%	29	3.9%	3	4.1%
Total	**1022**	**100.0%**	**747**	**100.0%**	**74**	**100.0%**

There were clear differences between paid work and work experience. As might be expected, 62.9% of paid student workers worked in retail or fast food outlets, cafes and restaurants, while only 24.8% of work experience students were in those industries. Work experience placements were far more likely than paid work to be in 'career'-type industries such as education, health, personal and community services. These are industries which do not offer much opportunity for part-time teenage

employment. Vocational placements showed a different pattern again. The relatively small number of placement students were clustered in certain industry areas. Retail and fast food/cafes/restaurants covered 48.9% of students, so the industry distribution was not unlike that of paid work.

Many of the employers in the focus groups and interviews had well-developed programs for work experience and vocational placements, and took large numbers of students each year.[4] These employers obviously spent much time liaising with schools and local placement coordinators organising programs for students. One employer commented that block periods for vocational placements would enable her to fit in more work experience students in the year, as students on one day a week placements meant those weeks were not available for work experience. She was clearly intent on being as accommodating as possible to students wishing to experience workplaces. In general, the employers displayed great willingness to help young people and their schools, and derived satisfaction - in most cases more satisfaction - from vocational placements than from work experience.

The survey also examined how much responsibility students had in their experiences of work. Paid work offered the greatest opportunities for responsibility, which could simply be related to the length of time spent in that job. Work placement offered more opportunity than work experience for responsibility, but still below paid work. While the fact that some students were only allowed to observe during work experience is to be regretted, the percentage of 4.5% is lower than some commentators have suggested. The quality of what was observed is also of some importance; one student on work experience observed a woman giving birth, which is obviously a profound and important learning experience.

Section 3 of the questionnaire included general questions concerning paid work. These related to how the students found out about their job; why they were working; their employment arrangements; and issues about fitting in their school work around their job. Informal methods of job seeking were the major means of finding work. 30.9% found their jobs through a family member; 21.5% through a friend; and 20.6% approached the employer directly. Only 6.9% saw the job advertised in the newspaper and 1.7% on a notice board. 4.9% found out about the job through the school and 13.4% used 'other' means of finding out about the job. The most important reason for seeking the job was overwhelmingly to get spending money. 57.6% cited this reason; 13.1% cited 'general experience of work' as the most important; and 9.0% 'to be more independent'. 9.3% of students worked mainly for money for living expenses; 4.2% because they would enjoy it; and 4.0% to get specific experience in an industry they thought they might work in later.

The case studies showed that schools, local coordinators and employers displayed great commitment to organising work experience and vocational placements for school students. Work experience was an almost universal part of school students' curriculum, with only special circumstances preventing participation. Rural schools appear to offer a more flexible and tailor-made approach to students in relation to work experience and vocational placements. This may relate to perceived difficulties in school-to-work transition and, related to this, to perceived difficulties in finding part-time jobs to gain experience of the workplace. In fact, the rural students did not seem to have a lower participation in paid work than the metropolitan students. Some students committed a great deal of time to their part-time jobs while others'

participation was only sporadic. Student workers were seen as an integral part of many companies' workforces, but in general no special attention was paid to them compared with adult workers.

Employers had comments and criticisms about the way work experience and vocational placements were organised by the schools. They wanted school students to be better prepared, and generally felt that the presence of a third party (for instance Compact coordinators in NSW) assisted students in their preparation and enabled better matching of students to placements. Several of the employers also employed part-time student workers but did not appear to see much link between this and other programs with school students.

The nature and relative importance of learning gained from these experiences

What students learned

The first aspect to consider is what the students learned in their time in the workplace. Tables 3 and 4 report on students' perceptions of their generic and 'employability' skills.[5]

Table 3: 'Did you develop the following general skills in this period of work experience?' (by work experience and paid work)

	A lot		Some		A bit		Not at all	
	Work exp	Paid work	Work exp	Paid work	Work exp	Paid work	Work exp	Paid work
Communication/writing	7.4%	13.0%	21.7%	15.2%	19.0%	18.1%	51.8%	54%
Verbal communication	43.9%	63.8%	31.8%	20.8%	18.0%	9.9%	6.4%	5.5%
Planning & organising	22.3%	34.0%	35.8%	35.5%	25.6%	20.1%	16.4%	10%
Working in teams	34.3%	47.5%	28.8%	25.8%	20.9%	13.4%	16.0%	13%
Using your intiative	37.9%	56.2%	34.7%	27.2%	17.9%	11.6%	9.5%	5.0%
Solving problems	23.6%	35.7%	35.9%	32.9%	23.7%	21.2%	16.9%	10%
How to behave at work	46.9%	57.5%	29.0%	22.5%	14.3%	10.3%	9.7%	9.7%

Table 4: 'Did you develop the following general skills in this period of work experience?' (by work placement)

	A lot	Some	A bit	Not at all
	%	%	%	%
Communication/writing	22.5%	21.1%	26.8%	29.6%
Verbal communication	50.0%	34.7%	9.7%	5.6%
Planning & organising	30.0%	42.9%	12.9%	14.3%
Working in teams	47.9%	28.8%	12.3%	11.0%
Using your intiative	34.7%	40.3%	18.1%	6.9%
Solving problems	24.7%	34.2%	21.9%	19.2%
How to behave at work	47.2%	22.2%	20.8%	9.7%

The results show that similar types of generic skills were developed in the three types of workplace activity, with 'behaving at work', 'verbal communication' and 'using your initiative' all scoring fairly highly, and 'written communication' scoring the lowest. Paid work and vocational placements both had verbal communication as the highest-scoring generic skill, while 'how to behave at work' was equal first for work experience. Overall, paid work appeared to be the most effective in developing generic skills, with vocational placements not far behind. The findings represented in Tables 3 and 4 were used to create a generic skills index for each young person.[6] The mean generic skills indices for each type of workplace activity were as follows:

- Work experience 12.33
- Paid work 13.98
- Vocational placements 13.81

Students were also asked about the 'special skills' involved in the 'jobs' they did. This gave some insight into the type of work they were doing. This was an open-ended question and responses were diverse, but some common responses were gathered together into categories during data analysis.

Table 5: Special skills involved in the three types of workplace activities

	Work experience special skills	Paid work special skills	Structured work placement special skills
Communication skills	10.5%	5.4%	8.9%
Dealing with customers	16.7%	48.8%	17.8%
Dealing with clients	4.5%	4.7%	n/a
Displaying patience	3.5%	2.3%	n/a
Operating a cash register	1.0%	4.4%	4.4%
Operating a computer	18.4%	5.9%	15.6%
Operating other	6.3%	4.1%	11.1%
Other	39.1%	24.3%	42.2%
Total	100.0%	100.0%	100.0%

Paid work involved more students in face-to-face contact with the public than was the case with students in work placements and work experience. As the table shows, dealing with customers is the priority for students in paid work. When students were asked how well they learned their special skills, vocational placement and paid student workers gave approximately the same results. Work experience was significantly lower.

How they learned

The focus now moves from what students learned to analysing how they learned in the workplace. The survey instrument gave students a number of options about how people learn at work and asked them to pick the three most important for them in the job or experience which they were discussing, then rank them in order of importance. Table 6 shows the responses for the first most important only.

Table 6: Most important way in which students learned in their workplace activities

	Work experience	Paid work	Work placement
Watching others	25.0%	19.1%	23.2%
Being shown by trainer or supervisor	35.9%	41.8%	44.9%
Being shown by fellow worker(s)	15.2%	14.9%	15.9%
Reading company manuals	.5%	1.7%	
Doing an off the job course	1.3%	1.9%	1.4%
Asking questions of a supervisor	9.2%	5.6%	4.3%
Asking questions of a fellow-worker	4.9%	3.6%	1.4%
Trial and error ('having a go')	4.5%	6.4%	5.8%
Other	.7%	1.2%	
I knew how to do it already from ...	2.7%	3.9%	2.9%

Links between school and work

Students were asked whether they discussed their workplace activities at school, either in class time or informally with friends. As might be expected, since vocational placements were connected with a school course, placement experiences were discussed more in class time than work experience or paid work. Vocational placements were also discussed with friends more. Paid work was the least likely to be discussed in class time, with over two-thirds of respondents saying that they never talked about their work in class, and over a quarter never discussing their work with friends.

Students were asked how much their workplace activities had helped them at school. Placement students were asked explicitly about links between their placement and the related course. The data showed close linkages between the two, with a clear indication that the schoolwork helped with the workplace experience more than vice versa. Students were also asked how much their workplace activities had helped them at school more generally. Paid work appeared to be the least help in schoolwork. This could relate to the lack of 'processing' of paid work back in school. However, even with paid work, a quarter of students said that their paid jobs had helped them 'a lot' or 'some' at school. Vocational placements came out on top, with 42.9 % saying their placement had helped them 'a lot' or 'some' compared with 30.1% for work experience. Around two out of three students felt work experience was useful despite the fact that they also had a paid job.

In the student focus group interviews, students most often reported being shown by 'the boss' - a manager or supervisor - and by watching other workers. Watching another worker perform a task while explaining it was felt to be a useful learning strategy. An advantage of workplace learning, as opposed to school learning, was that it was generally one-to-one. One student noted that a coworker could give individual attention and ensure understanding, whereas at school a teacher had to deal with other students simultaneously. The students frequently learned by teaching themselves. Other learning strategies included: trying jobs in different sections or departments; reading company manuals; using a checklist; and formal

training sessions. Employers noted that students asked questions, observed other workers, and modelled themselves on existing workers. Learning in the workplace was seen as different from learning at school. Many students appeared to prefer being in the workplace to being at school. Not all did, however, and some students reported increased motivation in schoolwork after periods in the workplace. This was variously because they began to have a clearer idea of what they wanted to do and how school could help them reach their goals, or because they learned that workplaces were hostile environments compared with school and thus appreciated school more.

Conclusion

Generally, students, school staff and employers saw most experiences in the workforce in a very positive way. Stakeholders believed that many positive outcomes result from the experience of work for many students while at school. Analysis of the data found:

- around 60% of school students have had formal paid work;
- without including paid work in family businesses, this figure drops to 50.1%;
- a significant proportion of school students have paid or unpaid work in family businesses (32.6% in all);
- most school students (almost 70%) have done work experience, and both teachers and students saw value in this experience;
- the industries in which students have paid work and vocational placements tend to be different from those where students have work experience opportunities;
- schools, VET coordinators and employers are enthusiastic about school students participating in work placements as part of schooling;
- communication skills and finding out what workplaces are really like are the most important aspects of learning in the workplace;
- students reported that they learned much more in paid work and vocational placements than in work experience; and
- students learned experientially, by watching others and by being shown individually by a trainer or coworker.

It was evident that students were not very focused on learning in workplaces in any of the three forms of workplace activity. In the focus group interviews, they had to be prompted to think in terms of learning. However, once prompted, some quite perceptive comments were made; for example one student noted the difference between 'people skills' as understood by her fast-food employer and the dentist with whom she did work experience. All of the participants - students, teachers and employers alike - paid less attention to learning in paid work than in work

experience or vocational placements, although the period of training was longer in paid work.

When considering the policy framework in which work experience and vocational placements are constructed, the arrangements and opportunities for such vary remarkably. The practical arrangements of implementation occupy much of the energy and time of school staff. The unprecedented explosion of students taking up VET opportunities as part of their senior schooling has lead to a focus on the pragmatics and on programs. Links between school and work, and the intended outcomes of such programs, need to be clarified and made explicit to students and host employers. However, all forms of experience in the workplace offer possible opportunities for students to develop their potential beyond school, which is particularly important for those students who fail to shine within the school system.

Acknowledgements

The authors would like to thank the other members of the project team: Sue Erickson and Steve Keirl; and research assistants Lou Wilson, Judy Geeves and Fiona Underwood. They would also like to thank the National Research and Evaluation Committee, who funded the research.

Notes

1. Australian Bureau of Statistics, The Labour Force, 6203.0.

2. Work experience (in some schools) and vocational placements (in most schools) may not be available until year 11.

3. The industry areas were slightly adapted from ANZIC codes.

4. It should be noted that in many cases employers had been recommended to the researchers by schools or education departments, and hence may have been examples of 'good practice' host employers.

5. The list of skills in the survey, combined Mayer Key Competencies (AEC/MOVEET 1993) and 'employability skills in Sections 3, 4 and 5 of the questionnaire.

6. This was calculated by allocating a weighting from student responses - eg 'they learned a lot' was given a weighting of 3 down to 'they learned a bit' at a weighting of 1. This was then multiplied by the three types of workplace activities, giving a possible range of 27 to 0.

References

Ainley J and Fleming M (1995) School-industry programs: National Survey 1995. Sydney: Australian Student Traineeship Foundation.

Ainley J and Fleming M (1997) School-industry programs: National Survey 1996. Sydney: Australian Student Traineeship Foundation.

Athanasou J (1996) Co-operative education: evidence from the United States and Australia. Paper presented to the Australian Student Traineeship Foundation/Dusseldorp Skills Forum on School-Industry Programs. Sydney: Australian Student Traineeship Foundation.

Billett S (1998) Aligning workplace and school-based experiences. VOCAL, vol 1, August, pp 41-43.

Figgis J (1998a) Benefits to business through school-industry partnerships. Sydney: Australian Student Traineeship Foundation.

Figgis J (1998b) The business view of student work placements. Vocal, vol 1, no 1, pp 25-27.

Frost M (2000) Releasing the genie: The impact on education of vocational education and training in schools. Curriculum Perspectives, vol 20, no 1, pp 45-50.

Greenberger E (1988) Working in teenage America. In J T Mortimer and K M Borman (eds) Work experience and psychological development through the lifespan. Boulder, Colorado: Westview Press.

Griffin C (1985) Typical girls? Young women from school to the job market. London: Routledge and Kegan Paul.

Hotchkiss L (1986) Work and schools - complements or competitors? In K M Borman (ed) Becoming a worker. Norwood, New Jersey: Ablex, pp 90-115.

Hull E B (1999) Student workers: earning and learning. Perth, Western Australia: Centre for Curriculum and Professional Development, Murdoch University.

Keating J and Zbar V (1994) School industry links: experiences from two Australian regions. Sydney: Dusseldorp Skills Forum.

Malley J, Robinson L, Keating J and Hawke G (forthcoming) Analysis of the implementation of vocational education and training within Australian school systems. Adelaide: National Centre for Vocational Education Research.

Miles Morgan Australia Pty Ltd (1998) A review of the potential for increasing workplace learning opportunities with employers for secondary school students in school-based vocational education and training programs. Nedlands, Western Australia: Miles Morgan Australia Pty Ltd.

Ministerial Council on Employment, Education, Training and Youth Affairs (2000) New pathways for learning. Report of the MCEETYA taskforce on VET in schools, extract, March.

Misko J (1998) Workplace learning for students. Market for vocational education and training: who pays and who profits. Conference papers, pp 347-366. Adelaide: National Centre for Vocational Education Research.

Misko J (2000) Getting to grips with work experience. Adelaide: National Centre for Vocational Education Research.

Petherbridge J (1997) Work experience: Making an impression. Educational Review, vol 49, no 1, pp 21-27.

Robinson L (1999) The effects of part-time work on school students. Longitudinal Surveys of Australian Youth, Research report no 9. Melbourne: Australian Council for Educational Research.

Ryan R (1997) Vocational education in schools: Review of research. Adelaide: National Centre for Vocational Education Research.

Shilling C (1989) Schooling for work in capitalist Britain. New York: Falmer Press.

Smith E and Harris R (forthcoming) Work placements in VET courses: evidence from the cross-sectoral literature. Adelaide: National Centre for Vocational Education Research.

Smith E and Green A M (forthcoming) School students' learning from their paid and unpaid work. Adelaide: National Centre for Vocational Education Research.

Smith E and Smith A (1996) Inside the black box: The employer's part in school VET courses. Journal of Career Development, Spring, pp 16-21.

Stasz C and Kaganoff T (1997) Learning how to learn at work: lessons from three high school programs. Berkeley, CA: NCRVE.

Stone J R, Stern D, Hopkins C and McMillion M (1990) Adolescents' perceptions of their work: school supervised and non-school supervised. Journal of Vocational Education Research, vol 15, no 2, pp 31-53.

Sweet R (1995) Linking schools and workplaces: lessons from overseas. Sydney: Dusseldorp Skills Forum.

Wooden M (1998) The labour market for young Australians. In Dusseldorp Skills Forum, Australia's youth: reality and risk. Sydney: Dusseldorp Skills Forum.

Yap K (1998) Learning and earning: full-time student, part-time worker. In J Bessant and S Cook (eds) Against the odds: young people and work. Hobart: Australian Clearinghouse for Youth Studies, pp 143-150.

Contact details

Erica Smith
SA WRAPS
174 Pulteney St
Adelaide, South Australia 5000
Ph: +61 8 8223 7377

Annette Green
Charles Sturt University
Wagga Wagga
Ph: +61 2 6933 2407
Email: angreen@csu.edu.au